

*CRICETODON MINUS* [sic] LARTET, 1851 (MAMMALIA, RODENTIA): REVISED REQUEST FOR A RULING ON INTERPRETATION. Z.N.(S.)1854

By the Secretary, International Commission on Zoological Nomenclature

In 1969 (*Bull. zool. Nom.* vol. 25, pp. 178–183) Dr M. Freudenthal (*Rijksmuseum van Geologie en Mineralogie, Leiden, Netherlands*) and Dr V. Fahlbusch (*Institut für Geologie und historische Geologie, München, Germany*) jointly asked for a ruling on the interpretation of the name *Cricetodon minus* [sic; correctly *minor*] Lartet, 1851. The species is one of three species of fossil hamster from the Miocene at Sansan (Gers), France. The name *Cricetodon minor* (the species is the nominal type species, by original designation, of *Democricetodon* Fahlbusch, 1964) has been used in two different ways for the past 20 years: French-speaking and Dutch-speaking workers use the name in the sense of Schaub, 1925; German-speaking workers use it in the sense of Fahlbusch, 1964. The two applicants thus represented the two schools of usage.

2. In October 1969 (*Bull. zool. Nom.* vol. 26, p. 122) Professor Pierre Mein (*Université de Lyon, France*) urged the Commission to ratify Schaub's usage but asked for a delay pending the publication of the work of Madame Baudelot of Toulouse. In her 1972 thesis (unpublished, so far as I know, in any other form), she followed Schaub's usage but did not examine the nomenclatural problem as such. In fact, the two schools of usage differ in their interpretations of certain taxonomic facts, and it is essential to state these first before clear proposals for resolving the nomenclatural confusion can be put forward.

3. In October 1983 I reopened the file on this case. I am indebted to both Dr Freudenthal and Dr Fahlbusch for further advice. I have also consulted Dr B. Engesser (*Naturhistorisches Museum, Basel, Switzerland*) and Dr R. Daams (*Geologisch Instituut, Rijksuniversiteit, Groningen, Netherlands*) and am grateful for their help.

#### THE TAXONOMIC FACTS

4. Lartet, 1851, described the new genus *Cricetodon* from the Miocene of Sansan with three included species, all new:

*C. sansaniense*: 'Un peu plus grand que le Hamster'

*C. medium*: 'D'un tiers moindre que le *Cricetodon sansaniense* et plus petit que notre rat noir'

*C. minus*: 'Plus petit que notre souris domestique'

(The specific names should all be masculine in termination.) No type species was designated until 1925, when Schaub designated *C. sansaniensis*.

5. Gervais, 1859, pl. 44, figs 21–26, figured, 'quelques débris de *Cricetodons* de Sansan qui m'ont été donnés par M. Lartet'. Although no names are given to the figures and the specimens are lost, Dr Freudenthal recognises *C. minor* sensu Schaub among them.

6. Schaub, 1925, recognised five species of *Cricetodon* at Sansan. These included *C. helveticus* Schaub, 1925, *C. gaillardi* Schaub, 1925 and *C. affinis* Schaub, 1925, but not *C. medius* Lartet, 1851, which Schaub could not recognise in the fauna. Schaub used the name *C. minor* Lartet for the smallest species present, and his usage of the name was generally followed thereafter until 1964.

7. In 1964 Fahlbusch described the new genus *Democricetodon* and designated *C. minor* Lartet, 1851 as its type species. He designated a lectotype for this species from among specimens in the Muséum national d'Histoire naturelle in Paris, but not all workers accept that these specimens are syntypes of the three species described by Lartet. Freudenthal points out that although *C. minor* is the commonest species at Sansan, where it forms 25% of the hamster fauna, it is not represented in the collection supposed to be Lartet's. There is no documentary evidence of the origins of this collection, nor any original labels by Lartet.

8. In the same work Fahlbusch also described *Megacricetodon* as a new subgenus of *Democricetodon* and designated *C. gregarius* Schaub, 1925 as its type species. In this subgenus he placed *C. schaubi* sp. nov. for *C. minor* Schaub non Lartet, and designated a holotype from the Basel Museum. In the subgenus *D.* (*Democricetodon*) he also placed *D. minor brevis* (Schaub, 1925). In his treatment of Schaub's taxa he upset nomenclatural usages that had been stable for nearly 40 years.

#### DIFFERENCES OF OPINION

9. Dr Freudenthal holds that Schaub's treatment of *C. minor* is closer to Lartet's original concept than is Fahlbusch's; moreover, his *C. minor* is the smaller of the two. It is consistent with Lartet's description 'plus petit que notre souris domestique' while Fahlbusch's is not. He recognises two small species at Sansan and thinks that Lartet may have confused them under *C. minor*. He places the true *C. minor* of Lartet (and, for him, of Schaub) not in *Democricetodon* but in *Megacricetodon*. He rejects Fahlbusch's lectotype as invalid and would like a suitable neotype to be designated for the species. For this he proposes the holotype of *M. schaubi* Fahlbusch. At the same time, he would like *D. brevis crassus* Freudenthal, 1969 to be designated as type species of *Democricetodon*, since that corresponds with Fahlbusch's concept of the genus. Both actions require the use of the plenary powers.

10. Dr Fahlbusch agrees that Lartet probably confused two small species of *Cricetodon* from Sansan, but holds to the validity of the lectotype that he designated for *C. minor*. He asks that his interpretation of that species be ratified by placing its name, as applied by reference to his lecto-

type, on the Official List. This would automatically give validity to his usage of the genus-group names involved.

11. Dr Freudenthal's view is supported by Dr Daams; Dr Fahlbusch's view is supported by Dr Engesser.

### THE EVIDENCE OF USAGE

12. The following references show usage since 1964 in the respective senses of Schaub and Fahlbusch:

#### Usage in the sense of Schaub

- AGUILAR, J. F. 1979. *C.r. Acad. Sci. Paris*, ser. D, vol. 288, no. 5, pp. 473–476.  
 — 1980a. *Palaeovertebrata* vol. 9, part 6, pp. 155–203.  
 — 1980b. *Palaeovertebrata*, Mém. jubil. R. Lavocat, pp. 355–364.  
 — & MAGNE, J. 1978. *Bull. Soc. géol. France*, ser. vol. 20, pp. 803–805.  
 BAUDELLOT, S. 1964. *Bull. Soc. Hist. nat. Toulouse*, vol. 99, parts 1–2, pp. 195–204.  
 — 1965. *C.r. somm. Séances Soc. géol. France* for 1965, fasc. 7, p. 222.  
 — 1969. *Trav. Lab. Géol.-pétr. Fac. Sci. Toulouse*, no. 35, 2 pp.  
 — 1972. *Etude des chiroptères, insectivores et rongeurs du Miocène de Sansan*. (Thesis, Toulouse).  
 — & COLLIER, A. 1978. *Bull. Soc. Hist. nat. Toulouse*, vol. 114, parts 1–3, pp. 194–206.  
 BULOT, C. 1972. *Bull. Soc. Hist. nat. Toulouse*, vol. 108, parts 3–4, pp. 349–356.  
 DAAMS, R. 1976. *Proc. k. nederl. Akad. Wet.*, Ser. B, vol. 79, No. 3, pp. 152–181.  
 — 1981. *Utrecht micropal. Bull.*, Spec. Publ. 3, pp. 1–115.  
 —, FREUDENTHAL M. & v.d. WEERD, A. 1977. *Newsl. Stratigr.* vol. 6, No. 1, pp. 42–55.  
 FREUDENTHAL, M. 1965. *Proc. k. nederl. Akad. Wet.*, Ser. B, vol. 68, No. 5, pp. 293–305.  
 — 1968. *Proc. k. nederl. Akad. Wet.*, Ser. B, vol. 71, No. 1, pp. 52–72.  
 — & SONDAAR, P. Y. 1964. *Proc. k. nederl. Akad. Wet.*, Ser. B, vol. 67, No. 5, pp. 473–490.  
 GUÉRIN, C. & MEIN, P. 1971. *Docum. Lab. Géol. Univ. Lyon*, N.S., pp. 131–170.  
 HARTENBERGER, J. L. 1967. *Palaeovertebrata*, vol. 1, part 2, pp. 47–64, 4 pls.  
 LACOMBA, J. I. in press. *Scripta Geol.*  
 LOPEZ, M., SESE, C. & SANZ, J. L. *Trab. Neógeno/Quaternario*, vol. 8, pp. 47–73.  
 MEIN, P. & CORNET, C. 1973. *C.r. somm. Soc. géol. France*, 1973, 2 pp.  
 — & FREUDENTHAL, M. 1971. *Scripta Geol.*, vol. 2, pp. 1–37.  
 SAVAGE, D. E. & RUSSELL, D. E. 1983. *Mammalian palaeofaunas of the world*. London, Addison-Webley.  
 SESE, C. 1977. *Trab. Neógeno-Quaternario*, vol. 8, pp. 127–180.

#### Usage in the sense of Fahlbusch

- DEHM, R. 1978. *Mitt. bayer. Staatsanml. Paläont. hist. Geol.*, vol. 18, pp. 289–313.  
 ENGESSER, B. 1972. *Tätigk. Ber. naturf. Ges. Baselland*, vol. 28, pp. 37–363.  
 FEJFAR, O. 1974. *Palaeontographica* Ser. B, vol. 146, pp. 100–179.

HEITZMANN, E. 1973. *Palaeontographica*, Suppl. Bd. 8, part 5B, pp. 1-95.

WU WENYU, 1982. *Zitteliana*, vol. 9, pp. 1-80.

### NOMENCLATORIAL CONSIDERATIONS

13. Apart from usage, which is strongly in favour of Schaub's interpretation, the principal nomenclatorial issue at stake is the status of Fahlbusch's lectotype of *Cricetodon minor* Lartet, 1851. This is one of a group of specimens in the Paris Museum which has no certain connection with Lartet. It does not contain any representative of *C. minor* sensu stricto, although that is the commonest species of the genus at Sansan. The only specimens for which there is evidence of a direct connection with Lartet are those figured by Gervais, 1869. These include representatives of *C. minor* sensu Schaub, but are lost.

14. Under these circumstances, it seems to me unsafe to accept Fahlbusch's lectotype as valid. The presumption surely must be that it is invalid in the absence of stronger evidence in support of its validity than any that has so far been produced. At the same time both taxonomic and nomenclatorial confusion clearly exists, so that there is good justification for the designation of a neotype. The only neotype so far designated is No. Ss. 1235 in the Basel Museum (Freudenthal, 1969, *Bull. zool. Nom.* vol. 25, p. 180). The Commission can accept this without using its plenary powers; or it can use those powers to set aside Freudenthal's neotype and set up Fahlbusch's lectotype as neotype in its place.

15. The Commission is accordingly asked to choose one of the following alternatives:

#### ALTERNATIVE A

(1) to rule that the lectotype designated by Fahlbusch, 1964, for *Cricetodon minor* Lartet, 1851, is invalid;

(2) to use its plenary powers to set aside all designations of type species for the nominal genus *Democricetodon* Fahlbusch, 1964, hitherto made, and to designate *Democricetodon crassus* Freudenthal, 1969, as the type species of that genus;

(3) to place the generic name *Democricetodon* Fahlbusch, 1964 (gender: masculine), type species, by designation under the plenary powers in A(2) above, *Democricetodon crassus* Freudenthal, 1969, on the Official List of Generic Names in Zoology;

(4) to place on the Official List of Specific Names in Zoology;

(a) *minor* Lartet, 1851, as published in the binomen *Cricetodon minus* [sic], as defined by reference to the neotype designated by Freudenthal, 1969;

(b) *crassus* Freudenthal, 1969, as published in the combination *Democricetodon brevis crassus* (specific name of type species of *Democricetodon* Fahlbusch, 1964).

## ALTERNATIVE B

(1) to use its plenary powers to set aside all designations of type specimen for the nominal species *Cricetodon minor* Lartet, 1851, hitherto made, and to designate as neotype of that species the specimen designated as lectotype by Fahlbusch, 1964;

(2) to place the specific name *minor* Lartet, 1851, as published in the binomen *Cricetodon minus* [sic], and as interpreted by reference to the neotype designated under the plenary powers in B(1) above, on the Official List of Specific Names in Zoology.

## REFERENCES

- FAHLBUSCH, V. 1964. Die Cricetiden (Mamm.) der oberen Süßwasser-Molasse Bayerns. *Abh. bayerischen Akad. Wiss., Math.-Naturwiss. Klasse*, N.F. vol. 118, pp. 1-136.
- FREUDENTHAL, M. 1963. Entwicklungsstufen der miozänen Cricetodontinae (Mammalia, Rodentia), Mittelspaniens und ihre stratigraphische Bedeutung. *Beaufortia*, vol. 10, no. 119, pp. 51-157.
- GERVAIS, P. 1859. *Zoologie et paléontologie françaises*, 2nd edit., viii+544 pp., Atlas.
- LARTET, P. 1851. *Notice sur la colline de Sansan*, 47 pp.
- SCHAUB, S. 1925. Die hamsterartigen Nagetiere des Tertiärs und ihre lebenden Verwandten. *Abh. schweizerischen paläontol. Ges.*, vol. 45, pp. 1-114.